Collaborative Learning Action Cell (CLAC) mentoring program to self-efficacy of the out-of-field senior high school teachers

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Abstract

Teachers teaching not their field of specialization is unavoidable; thus, structural support must be in place so that the school supports these teachers. Considering this prevalence, the study aimed to determine the effects of the collaborative learning action cell (CLAC) mentoring program on the self-efficacy of the out-of-field Senior High School (SHS) teachers of New Lucena National Comprehensive High School during the second semester of the academic year 2018-2019. This action research utilized an experimental method specifically, the one-group pretest-posttest design. The participants of this study were the purposively selected 12 out-of-field SHS teachers. The research instrument adopted was the Ohio State teacher efficacy scale (OSTES) to capture a broad range of capabilities necessary for good teaching. The results of the study revealed that the level of self-efficacy of the out-of-field SHS teachers is "low" prior to the intervention and "high" level after exposure. Furthermore, the teachers' self-efficacy level significantly increased after exposure to the program. Thus, the CLAC mentoring program is an alternative program to increase the level of self-efficacy of the out-of-field SHS teachers. The research study calls for the importance of formulating a school-initiated intervention that will guide efforts to assist out-of-field teachers.

Keywords: collaborative learning action cell; out-of-field; senior high school; self-efficacy

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Introduction

The advancement of education is essential to the country's progress. Education, therefore, is the key factor in human development (Haseena & Mohammed 2015). For decades, there has been a major and growing focus on education (Dinham 2013). The education system aims to produce a well-educated generation of young people to face present and future challenges. This requires quality teachers who are highly ready to implement the education policies. A quality teacher with utmost readiness needs an uncluttered mind, prepared to engage with the learning material innovatively (Pribudhiana et al. 2021).

Regardless of their position on the education reform and improvement debate, everyone agrees that most teachers' professional learning opportunities are scant, sporadic, and of little use for raising teaching standards (DeMonte 2013). With this, teachers could not stay long in the profession. The workload and accumulated numerous sources of stress have several maladaptive consequences. Necessary consequences for a number of the teachers were physical and emotional exhaustion, the sacrifice of social lives, increasing instances of sick leave, the reduction of teachers' employment with

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economic consequences for the individual teachers, and early retirement, with disability pension for some teachers (Skaalvik & Skaalvik 2015).

New teachers are abruptly placed in a highly engaging, emotional, and identity-challenging environment. Their induction is a trying time and a turning point in their career. The significance that novices used to attach to their teacher identity and their social working environment are two characteristics that are likely to have an impact on their sense of self-efficacy and emotional wellbeing. There is a connection between how these individual and environment-related dimensions interact and are related to new teachers' outcomes (Devos 2012).

Teachers' efficacy beliefs are thought to influence their motivation and performance and their students' achievement. As a result, researchers are now focused on the sources that underlie these crucial teacher beliefs (Morris et al. 2017). Chong and Kong (2012) study revealed that teachers with stronger self-efficacy in learner engagement, instructional strategies, and classroom management felt more capable of delivering literacy instruction. Furthermore, Martin et al. (2012) confirmed a relationship between a teacher's efficacy and learner behavior. Evidence suggests that effective teacher professional development programs are focused on the specific subject matter, ongoing, and connected to practice; they also foster strong working relationships between teachers and have an impact on teacher efficacy, which has been empirically linked to increased student achievement, as well as teacher adaptability and adjustment (Chong & Kong 2012).

During the past years, mentoring programs have become an increasingly familiar idea in the education field. According to Gless (2012), the prerequisites for any mentoring program's success are well-trained mentors, administrators who value the program, and campus-level mechanisms that foster new teachers' efficacy. Gless (2012) went on to say that (a) qualified instructional mentors, (b) successful principals, (c) support systems for beginning teachers, (d) strong program leaders, and (e) continual program evaluation is all necessary for induction program success.

In the Philippines, the K to 12 Program launched by the Department of Education has added two years to the basic education curriculum to equip learners with skills for college and technical and vocational employment. The program, which commenced last academic year 2016-2017, has resulted in an increased number of learners in secondary schools leading to a shortage of teachers. The phenomenon of out-of-field teaching, where teachers are placed in teaching positions in which they have to teach subjects or year-levels outside their field of qualification or expertise, appears in public schools and independent schools (Du Plessis et al. 2014).

The New Lucena National Comprehensive High School in New Lucena, Iloilo, Philippines, is not an exemption from this scenario. There are 26 teaching forces in the Senior High School Department. Out of the 26, 12 teachers are out-of-field teachers handling subjects different from their major or field of specialization. This situation can compromise the self-efficacy in the teaching of the new teachers. With the increase of out-of-field teachers in the school, the researchers are interested in how mentoring program might be utilized with this educational group.

Since this situation is inevitable in schools, continuous education through proper training is encouraged. It is essential to understand and investigate the structural supports that are in place in schools for beginning teachers. The school finds its way to support teachers who are undergoing this challenge. Hence, this study is conducted.

This action research aimed to determine the effects of the collaborative learning action cell (CLAC) mentoring program on the self-efficacy of the out-of-field Senior High School (SHS) teachers of the New Lucena National Comprehensive High School during the second semester of the academic year 2018-2019. Specifically, this study aims to answer the following questions: (1) What is the level of self-efficacy of the out-of-field SHS teachers before implementing the collaborative learning action cell mentoring program? (2) What is the level of self-efficacy of the out-of-field SHS teachers after

implementing the collaborative learning action cell mentoring sessions? (3) Is there a significant difference in the self-efficacy of the out-of-field SHS teachers between pre- and post-intervention? and; (4) What are the actions to be undertaken after assessing the implementation of the collaborative learning action cell mentoring program as an intervention?

The findings of this study hoped to provide the basis for the formulation of a school-initiated intervention program that will guide efforts to assist teachers teaching not their major/specialized subjects. Its results will contribute toward school formulation that will effectively respond to the needs of out-of-field teachers.

Methods

This action research utilized an experimental method specifically, the one group pretest-posttest design. The participants of this study were the purposively selected 12 out-of-field Senior High School (SHS) teachers of New Lucena National Comprehensive High School in New Lucena, Iloilo, Philippines, for the second semester of the academic year 2018-2019. Fraenkel et al. (2013) confirmed that when using a purposive sample, researchers must "using their judgment, choose a sample that they believe will offer the data they require based on previous information." Also, Fraenkel et al. (2013) warned that the significant disadvantage of purposive sampling is that the researcher's judgment may be in error – they may not be correct in estimating the representativeness of a sample or their expertise regarding the information needed". The subjects were the 12 out-of-field Senior High School teachers for the academic year 2018-2019.

The research instrument adopted was developed at the Ohio State University; it is known as Teachers' Sense of Efficacy (also known as the Ohio State Teacher Efficacy Scale). It is a standardized instrument designed to understand better the things that create difficulties for teachers in their school activities (http://stelar.edc.org/instruments/teachers-sense-efficacy-scale). The assessment consists of 24 questions, including three teachers' efficacy subscales: instructional strategies, classroom management, and learner engagement. These items used a 9-point response scale with anchors at 1 (nothing), 3 (very little), 5 (some influence), 7 (quite a bit), and 9 (a great deal).

The researcher requested permission from the school authorities before conducting the study. Permissions were granted by the school principal of the New Lucena National Comprehensive High School. The participating teachers were given consent forms during orientation, providing a complete project overview. The first step of the research process involved teachers completing a Teacher Efficacy Scale form.

After the pre-assessment, mentees were given specific instructions about their participation in completing a weekly teacher timesheet. These logs were kept confidential, and no information found in these records was shared with the school and had no impact on their future employment with the school.

This study adhered to the ethical standards which upheld the teachers' confidentiality and anonymity. A letter was given for the participants to sign to signify their consent. The letter was printed in the English language. It detailed the nature and extent of their participation in the study.

Specific instructions were given to the respondents before answering the assessment. An orientation about the rationale, scope or coverage, significance, roles and functions, and benefits of this action research was conducted for all Senior High School teachers to solicit their all-out support and commitment. After receiving all of the data from the respondents, the researchers organized the information. Data were organized by individual and when taken as a group so that the analysis of the collected data would be done seamlessly. After completing the final steps of organizing the information, the researchers analyzed the data.

All statistical data were processed with the aid of Statistical Package for Social Sciences (SPSS) software version 22. The level of significance for inferential statistics was tested at 0.05 alpha.

Results and Discussion

The overall mean score for all the 24 items answered by the respondents using the Ohio Teacher Efficacy Scale Instrument was calculated. It results in a low level of self-efficacy scale (Mean=2.68; Standard Deviation=0.21). It can be inferred that the out-of-field SHS teachers are not efficient as they can effectively deliver instruction, implement effective classroom management and engage the students in school activities in their subjects (see Table 1).

Table 1.
Pretest and posttest scores of the out-of-field SHS teachers before and after the implementation of the CLAC mentoring program

	N	Mean	SD	Interpretation
Pretest	12	2.68	0.21	Low self-efficacy
Posttest	12	3.98	0.34	High self-efficacy

Note: 4.51-5.00 = Very High; 3.71-4.50 = High; 2.81-3.70 = Average; 1.91-2.80 = Low; 1.00-1.90 = Very Low

After implementing the CLAC mentoring program, the same instrument was given to the respondents. The respondents were observed to have a high level of self-efficacy (Mean=3.98; Standard Deviation=0.34). It can be inferred that teachers with higher teaching efficacy find teaching meaningful and rewarding, expect students to be successful, have positive attitudes about themselves and students, feel in control, and share their goals with students. Teacher efficacy is related to positive teaching behavior and student outcomes (see Table 1).

A Wilcoxon Signed Rank Test was employed to determine the level of self-efficacy of the out-of-field SHS teachers between pre- and post-intervention of the CLAC mentoring program. There was a significant difference between the pre (Mean=2.68, Standard Deviation=0.21) and post (Mean=3.98, Standard Deviation=0.34) intervention of the said mentoring program in the level of self-efficacy of the out-of-field SHS teachers (see Table 2). The result meant that the respondents' self-efficacy level from pre-intervention increased after implementing the CLAC mentoring program. This is only true at the 0.05 level of significance.

Table 2.
Results of descriptive statistics and Wilcoxon Signed Rank test for the level of self-efficacy of out-of-field SHS teachers

	Pre-test			Post-test			Sig.	Z	df
Level of Self-Efficacy	M	SD	N	M	SD	N			
	2.68	0.21	12	3.98	0.34	12	0.02*	-2.28	11

*p<.05 significant
Source: Research data that has been tested using SPSS

Olesova and Campbell (2019) provide the teachers' perception that mentoring enables the teachers to align instructional strategies with the expected learning outcomes. The semi-structured interview results showed that open-mindedness, motivation, and efficient working relationships were the significant factors that affected the cooperative mentorship relationships between teachers to produce and teach a high-quality course. Also, the research results by Nopriyeni et al. (2019) show that

mentoring significantly increases the components' pedagogical competencies. A similar idea is expressed by Mathur et al. (2013), Hudson and Hudson (2016), and Janikula (2017) that a mentoring program is intended to allow the participants' decision-making abilities to be improved as well as their self-confidence and efficacy. These conform to the outcome of the collaborative learning action cell mentoring program. An increase in self-efficacy ensures the effective transfer of learning during lesson delivery.

Onjoro et al. (2015) provided strategies that motivate teachers to ensure an assured quality education system. Motivation strategies include training and development, promotion, salary, pleasant working conditions, and participatory decision-making. It concurred with the result of the study, which provides that the development as one of the teachers' motivational needs/strategies strengthened to promote teacher's efficiency, productivity, and performance for quality outcomes has been provided for by the school through the collaborative learning action cell. Teachers were provided with assistance to ensure a quality assured learning delivery despite being teachers out of the field. Thus, a positive outcome was attained. The utilization of the collaborative learning action cell program is an effective program to train out-of-field teachers to improve their level of self-efficacy.

Conclusion

The CLAC mentoring program is an effective program to increase the level of self-efficacy of the out-of-field SHS teachers. The mentoring program has enhanced the relationship among mentors and mentees that open communication is developed through a shared repertoire. Difficulties and concerns of the mentees are quickly addressed. CLAC has also equipped the mentees with knowledge and skills needed in their new subject area, enabling them to teach with high efficacy. Furthermore, teachers felt confident in teaching an out-of-field subject. They were able to prepare lesson plans aligned with the learning competencies of their new subject loads with the help of their mentors.

The action to be undertaken is to apply this mentoring program in other schools to improve the teachers' self-efficacy. However, the researchers believe that the goal of improving the teachers' performance also depends on several factors. Thus, the successful using of the CLAC mentoring program significantly also relies on the ability of the learning facilitator or the mentor; therefore, cautious planning and implementation of the intervention program should also be considered.

The study was limited to the out-of-field SHS teachers of NLNCHS for the academic year 2018-2019; results can only be generalized to the respondents. It is suggested that a similar study be conducted in other schools. The study only determined the respondents' self-efficacy level between pre- and post-intervention. Thus, it is recommended that a further study be conducted using other factors affecting self-efficacy like sex, age, and teaching position.

The standardized questionnaire gathered data through a survey, observation, and focus group discussion. It is suggested that a similar study be conducted by explaining clearly and accurately how the respondents should answer the instrument. Other researchers should be there personally with the respondents as they answer the instrument for further explanation and clarification.

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